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U.S. Patent Application Serial No.: 10/511,277
Attorney Docket No.:100341-00054

AMENDMENTS TO THE CLAIMS

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

1. (Currently Amended): A game system including a game machine and an input device, under which a player plays a game using said input device, wherein

said input device comprises an acceleration sensor for generating an acceleration correlation signal when said player actually swings said input device in a real space, and a transmission unit for transmitting said generated acceleration correlation signal to said game machine; and

said game machine displays a ball on a monitor screen through execution of a game program in which a CPU player controlled by a computer program plays against said player, and further comprises:

a first calculation unit for calculating a predicted return position of said ball returned by said CPU player;

a judgment unit for judging whether a current position of said player is in a ball strikable range by comparing said predicted return position and the current position of said player;

a ball striking position movement unit for automatically moving a ball striking position of said player to be approximated to said predicted return position in which said judgment unit judges that the current position is out of the ball strikable range in response to a negative judgment by said judgment unit;

a swing detection unit for detecting whether said input device has been actually swung or not; and

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a second calculation unit for calculating an initial speed vector of said ball after received when said swing detection unit has detected a swing in which the position of said ball exists in a ball receivable range that is three-dimensionally defined in a ball receivable range, from a position of said ball and acceleration of said input device according to said acceleration correlation signal.

2-5. (Canceled).

6. (Currently Amended): A game system including a game machine and two or more input devices, under which two or more players play a game using said input devices, wherein

 said input devices each comprise an acceleration sensor for generating an acceleration correlation signal when said player actually swings said input device in a real space, and a transmission unit for transmitting said generated acceleration correlation signal to said game machine;

 said game machine runs a game program in which said two or more players play the game and displays said ball on a monitor screen, and further comprises:

 a first calculation unit for calculating a predicted return position of a ball returned by an opposite player;

 a judgment unit for judging whether a ball striking player is in a ball strikable range by comparing said predicted return position and a current position of said ball striking player;

 a ball striking position movement unit for automatically moving a ball striking position for said ball striking player to be approximated to said predicted return position

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when said judgment unit judges that the current position is out of the ball strikable range
in response to a negative judgment by said judgment unit;

 a swing detection unit for detecting whether said input device has been actually
 swung or not; and

 a second calculation unit for calculating an initial speed vector of said ball after
 received when said swing detection unit has detected a swing in which the position of
said ball exists in a ball receivable range that is three-dimensionally defined in a ball
receivable range, from a position of said ball and acceleration of said input device
 according to said acceleration correlation signal.

7. (Previously Presented): A game system according to claim 1 or 6, wherein
 said input device further includes an operating switch;
 said transmission unit transmits an operation signal from said operating switch
 together with said acceleration correlation signal to said game machine; and
 said game machine further comprises a position movement unit for moving said
 ball striking position on said monitor screen from forward position to backward position
 or from backward position to forward position, in response to said operation signal
 transmitted from said input device.

8. (Previously Presented): A game system according to claim 1 or 6, wherein
 said transmission unit of said input device includes an infrared light-emitting element for
 transmitting said acceleration correlation signal by means of infrared light.

9. (Previously Presented): A game system according to claim 8, wherein

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said transmission unit digital-modulates and transmits said acceleration correlation signal to said game machine; and

said game machine digital-demodulates said acceleration correlation signal transmitted by said transmission unit.